

Learning engagement based on cloud classroom

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ABSTRACT

Present day showing techniques request imaginative and powerful utilization of innovation at most extreme level. Consolidating a virtual group outside classroom instructing has turned out to be inescapable in computerized age training. This exploration was planned to discover how this can be utilized as a part of terms of intuitive instructing and how it can encourage understudies to recuperate the absences of learning in classroom. A web group of a college called Learning Feedback System (LFS) has been utilized here as the strategy to break down five example cases. Impacts of A critical level of connection in LFS showed that it decreased the correspondence hole between understudies and educators that obviously prompting appropriate learning.

Keywords

Interactive teaching, Learning feedback method, virtual community, technology education.

1. INTRODUCTION

Technology transfusion have evermore had an exigent dominance on industry upliftment, touching even the most consecutive systems such as study. Following the ordinary mutation of people's exercise and the world's job market composition, the education segment has gone per a massive association metamorphosis over the dernier several years. The tools allow for shared entrance to teaching components and support education-base information. When it appears to digital learning, there are a numerous tools and solicitation to pick from. Which ones choose

to use should really be about what works best for educational needs, over the loyalty to a particular brand.

The thought of virtual classroom has its variant illustration solicitation, but it for starters allude to technology that inflict potential possessing via the web. The amenities of proposing these scheme are most repeatedly observed in kinship to business, but its impression on the learning segment is no under momentous. Educational establishment in the universe have meanwhile adapted the cube to their radical appointment and formed use of its august brawny for newness.

2. LITERATURE REVIEW

Sometime before the invention of modern communication technology such as Computers, internet, Mathematician from the Massachusetts Institute of Technology, also a computer scientist, and an education visionary Seymour Paper found the idea very worth investigating that, the connected electronic device can be used to improve the experience of student while they are learning. Even the students from poverty line could be benefited from it even they are isolated geographically and socially. [1] Bangladesh is an inspiring country. Bangladeshi government declared the priority of ICT sector as usage of the eye of "Digital Bangladesh". They are supporting the corporation of technology into different equilibrium of education including the school, college and universities.

Only lectures can't fulfill the strong leaning for deferent type of students in the classroom. [2] There are many technologies (online discussion, video, audio etc) can be the ways

of instructing and instruction process. With this process many institutions are enhancing different type of method for better solution of the students. But now and then it can be listen to explain each class conversation and there are some other restriction. In that case, the virtual classroom can be a high opportunity to help the students' discussion with their teachers and friends also. Procedure for Paper Submission.

3. PROBLEM IN CLASSROOM

It is often difficult for a teacher to reach all the students and discuss with their problems in a limited hour class. [3] For the all teachers, it is often hard to gratify all the students to rehearse them. Again For all the students, it is hourly very ticklish to feel all the class lecture and ask question to their teacher in limited time. If we dispose a big size class for individual counseling then it may be not a good solution for every time and can't be practical. "There are many learners who are gawky and do not disinterest to conversation with their teacher". There are divers' ways to create the classroom usable and amusing for something like conversation, playing and many other avenue to create the classroom winsome. It is not guarantee that 100% satisfaction of the students. So the teachers can not 100% monitoring of their students.

There are abundant students who are pass there H S C exam in "Bangla" version. When they admit their university then it is more difficult to learn their superior education in English version. Most of the students can't peruse and scribe English properly. They can't write their answer in exam hall clearly. Sometimes they can't capable to understand their question paper. Yousuf Islam conducted an investigation on the matter and the result that he found is enclosed here: "To understand the trouble students have with sentence making, 18 students in first year, first semester were given a task in free-writing –any incident in their lives that affected them. The 334 collective sentences were analyzed for the type of mistakes made. 63.5% of the sentences were found to have one or more problems. The highest type of error was subject-verb

matching which was found in 19.3% of the sentences followed by preposition errors at 14.2%, etc. Students who wrote correct sentences were generally found to be writing simple sentences like those of a 3rd or 4th grader. This whole exercise was abandoned when it was accidentally discovered that when a student was asked to repeat the whole exercise, the types of mistakes were different. After a few trials, it was concluded that errors are randomly made –students have little or no idea of sentence construction [4]".

4. WEB TECHNOLOGY IN THE CLASSROOM

In 21st century, technology in the classroom is becoming more and more rising. Many other devices like tablets are replacing textbooks. Social media has become usual. We can use technology has completely transformed the way we live or lives. Students believe and prefer that technology can make learning more fun and interesting. Students deem boring or challenging can become more interesting with virtual education, through a status, file, video or when using a web technologies. Many educators argues that the only way to continue our dominance and prosperity in the world economy and politics is to educate our people as competitive and creative members of the global community, and the proper integration of technology in our education system is crucial to accomplish the goal. Numerous research papers, articles, and books were written on integrating technology into the classroom, and they often couple it with the 'constructivist' learning theory. Many of them using technology to enhance teacher-student communication and to promote collaborative and active learning, which calls for a dramatic paradigm shift from the lecture based education model. [5]

Some students are embarrassed or shy when they are called on in class. An alternative is to call on 2 people, perhaps sitting beside each other, together. Collectively they might do a better job than asking 2 students separately. This technique works especially well if the students have to think about an answer or do a calculation, or

work at the board. This tip was suggested by Marion Cohen, a part time math faculty. [6]

Technology also play a big role in the relationship between the students and the teachers: When technology is effectively integrated into subject areas, teachers grow into roles of guides and facilitator's. While students take responsibility for their learning outcomes, Technology lends itself as the multidimensional tool that assists that process. And help to makes teaching and learning process more meaningful and fun. [7]

Technology can have a reciprocal relationship with teaching. The emergence of new technologies pushes educators to understanding and leveraging these technologies for classroom use; at the same time, the on-the-ground implementation of these technologies in the classroom can (and does) directly impact how these technologies continue to take shape.[8] There are many ways to integrated technology in the classroom. Many teachers and students don't know how they use technology in their classroom. The Education World Tech Team offers lessons and activities to help educators make better use of technology tools for instruction, and to help students improve their technology skills within the context of the regular curriculum. Included: Integration activities that utilize the Web, PowerPoint, Excel, digital photography, SMART Boards, and more.[9] There are also many educators, less familiar and less comfortable with web technology then there students. So our virtual classroom help you make the best use of web technology in your school, collage and

universities. We are sharing some many user friendly features. Using this web technology in the classroom will be easier for the teachers and students.

5. METHODOLOGY

This research paper will discuss of web technology that added in the virtual classroom. And also added how teachers and students benefited can. The researcher observed other web technology tools that has already integrated in the classroom.

Course Blog and Wiki spaces allow students to hold online written discussions. Both of these promote editing. Blog allows the writer to post commentary and visitors to leave responses whereas wiki permits the live editing and revision of content of posted document [10].

This research paper will be completed in a professional manner. Here the researcher destination which encourages the collaboration between teacher and student. Here the environment is paper free. In this virtual web technology classroom is to be in the improvement of educator's workflow and therefore saving much-needed time.

The major motives of the experiment paper are mentioning bellow:

- Interface should be light to use.
- Spread knowledge with everyone.
- Feasible traffic and sharing

Use case model:

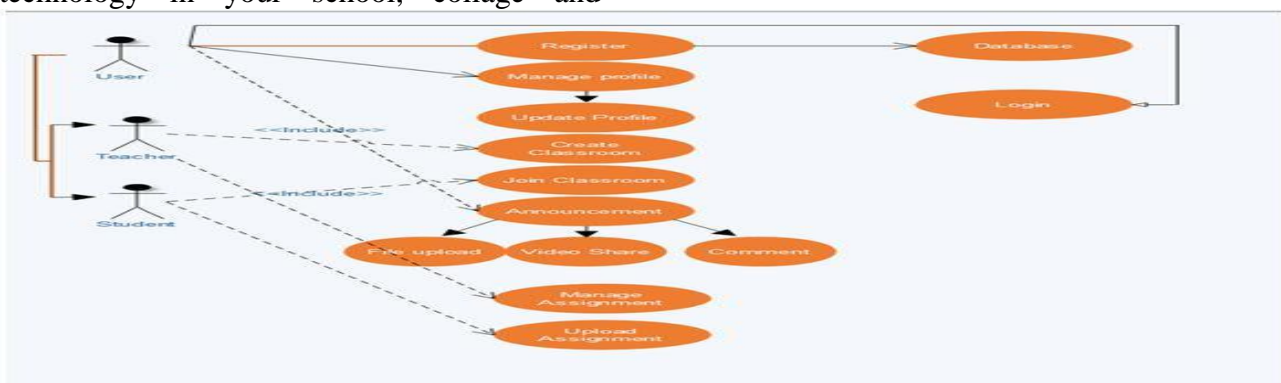


Fig. 1 Use case model of the proposed system

All user need to register first for login any time anywhere. Teacher can create one or many classroom with their own choice. Then trainer can glance a blank classroom where they can't see any post. They only can see some basic information that subject name, class code, section. Teacher requirement to provide that class code with their student.

Student can join in theirs classroom with class code. They can see all activity in theirs classroom. Teacher and student can give a post, comment, share video and many more. Teacher can manage course materials, assignment and many more.

6. DATA MODEL REQUEREMENTS

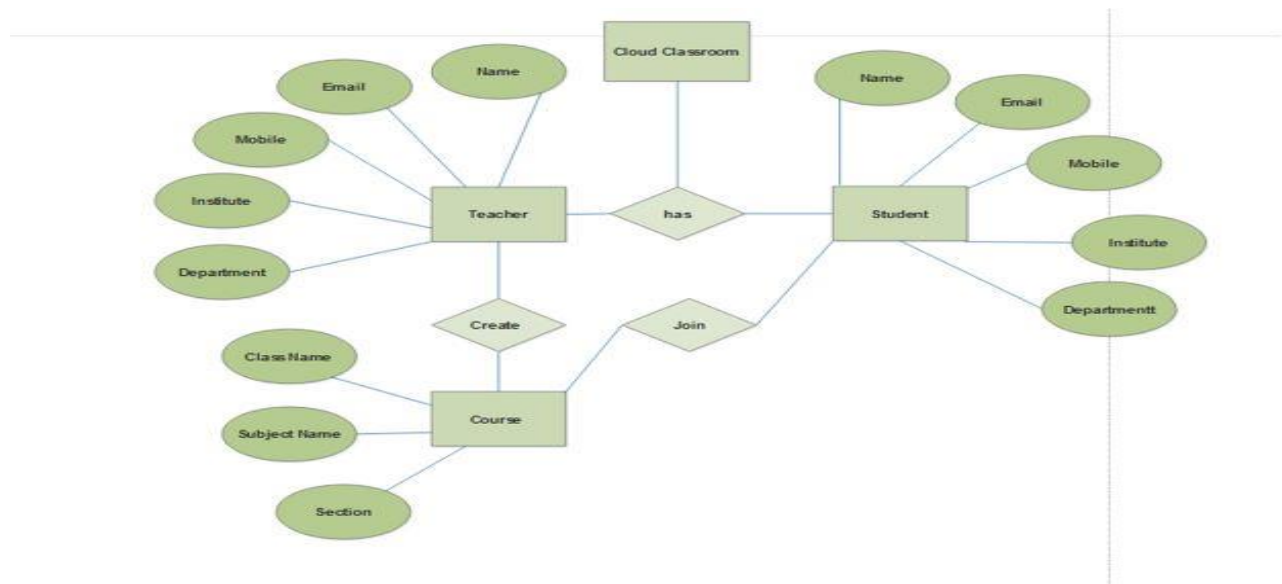


Fig: 2 Data model of proposed system

The entity relevance sketch and data pattern is emerged on The appreciation of real world that structure of an ingathering of Intention called essence, and of relevance between these Essence. The data pattern of the raised method is exhibited in The Fig. 2.0. Emerged on the metadata requirements, the database Blueprint is exhibited in the following Fig. 3.0. Requirements investigation used the way of sympathetic of The user emergent and expectation from the mentioned method or Entreaty. Requirements are to advantage defined of how the Raised method should act. The software necessity Exploration method also tunicate the intricate ought of invent and Documenting the requirements of whole these users, modelling and As a basis for method sketch.

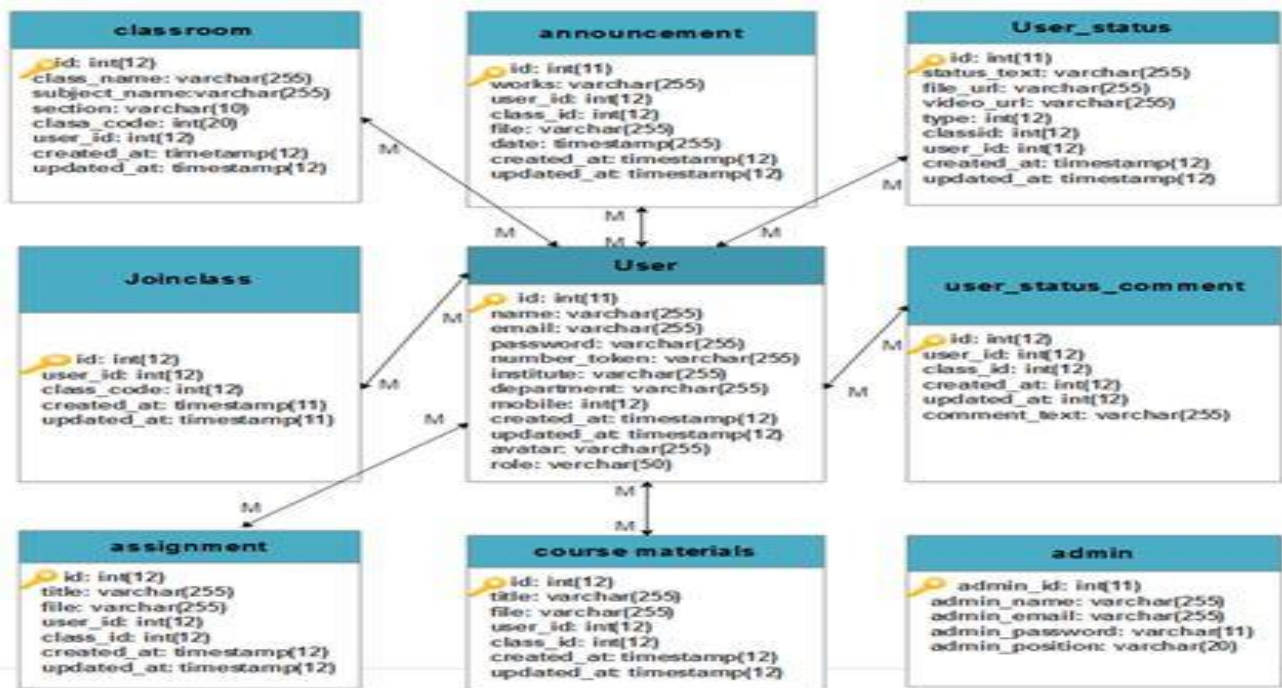


Fig: 3 Schema of the proposed system

7. IMPLEMENTATION AND TESTING

The proposed model is implemented using PHP object model and an amply informed MVC framework called Laravel.



Fig: 4 Home page of the proposed system

As exhibited in the Fig. 4, the home page contains different elements of the proposed system which includes both the some features

and components. The user, can know about this classroom throw this home page.



Fig: 5 Classroom of the proposed system

Suppose Mr. Shah is a teacher of system analysis and design. He need to originate a classroom for his learners. He need to register as a teacher to define his role teacher. And his student also concernment to define as a student in register page. After register teacher originate a classroom by clicking create classroom.

After creating a classroom by the teacher he get one class code in his classroom. Then he need to provide that class code to his students. After getting the class code student can join that class by putting that class code in join a classroom option.

Suppose teacher has been originate a classroom which name is System Analysis & Design? He need to upload a very momentous annunciation for his student that "Dear student I can't able to take your class tomorrow. So have fun and see you next class".

Now if teacher need to upload his class note by doc, pdf file he can upload easily in his classroom and student can see, read, view and download also that file. Suppose teacher need to upload a class note for system analysis class Lecture 1.

There are many YouTube tutorial for any subject related. Now if teacher need to percentage any subject related YouTube video tutorial he can do it easily. Suppose System

Analysis and Design teacher need to share a tutorial from YouTube then he simply go to the video URL and copy the URL id and pest video share option and suitable title is needed.

Teacher can post an announcement, upload a lecture and share a video. If students need to discuss something about the topic with the teacher then they execute comment anything in using comment box. In comment box teacher can provide answer for student.

System analysis and design is a core course of computer science and engineering. Numerous students take out this course. Teacher imperatives to give a work topic and take out the work from his students.

If teacher give an assignment topic with a due time and take out the assignments from his students with hardcopy it will be a long process. To unravel the long process virtual classroom will be a great solution. Let the assignment topic is "Differences between Red Box Testing and White Box Testing".

Then student can closed their work in virtual classroom. Students work visible only for the teachers. Student can't review or edit the works after uploading.

Suppose for the system analysis and design class teacher wants to upload all course

materials by zip folder for his students. Yes he can upload all course materials by clicking on course materials option. He must need to upload all files by zip folder.

In the virtual classroom teacher can see and counselor the student. Student can also become acquainted their classmates.

8. STUDENT FEEDBACK

A metering was driven from the students of one section (about 50 students) of student

sagacity of using virtual classroom. They leave some comments after using virtual classroom.

Some comments are here:

- Virtual classroom gives us a location to interlude.
- I think it's save lot of time.
- Virtual classroom is so user friendly.
- We can discuses easily via comment box.

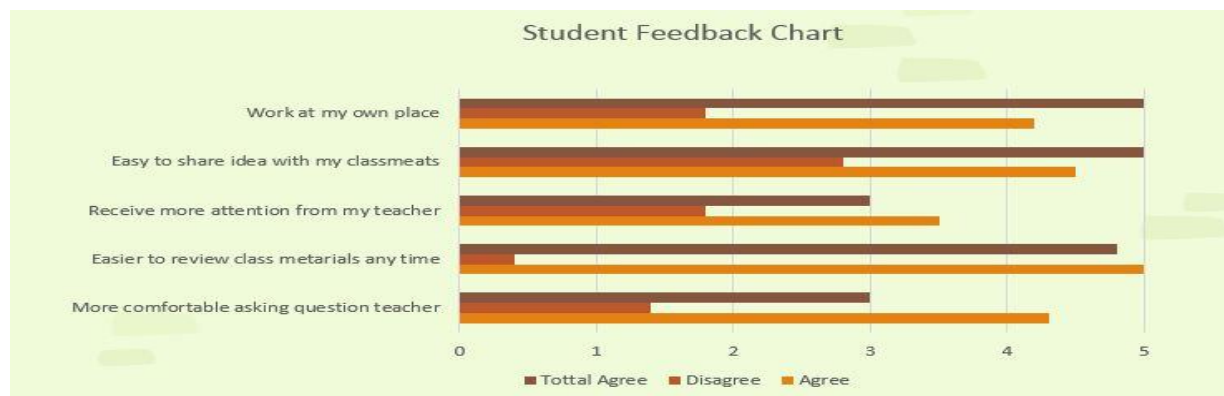


Fig: Student feedback in proposed system

9. LIMITATION

The virtual classroom has some limitations. It does concernment computer, internet and at the very first Levin. It has another limitation, it may accommodate the user to generate use of plagiarism. The mathematical way of grading the virtual student may need some more advancement as well.

According to Shibli Shahriar, the following are the hindrances in engaging students in their university for their learning feedback system (LFS) [11]:

1. Fear of mistakes: Students might be afraid of mistakes when they want to join in the discussion with other fellow students.
2. Access to Internet: Some students don't have any access to internet or they may think that using internet will be costly for them compared to its benefits derived from writing.

3. Lack of creativity: Many students didn't learn to think as they feel teachers will give

Those questions and they will memorize them to enhance the participation and to reduce the dropout rate, the followings are suggested:

A tutorial class on practically using LFS.

Sufficient computers and internet facility.

Intrinsic and extrinsic motivation to participate in discussion Designing questions that make sure to stop copy and paste culture

10. Conclusion

Technology gives us a new measure in learning and teaching. In this time of technology teacher should to teach their students to contribute the world. There is so much that students can do with the Internet. Not only can they communicate with international students, they can gain from

others' knowledge and experiences, participate in classrooms, share ideas and solutions and learn about the many diverse cultures out there.[12].Tim O'Reilly & Battelle (2009) has favored Web 2.0 as a better and quicker adaptation of students to technology, to the extent that Internet has become a platform simple and easy to use that corresponds to their interests and personal needs benefiting the collective intelligence[13]. The virtual classroom scheme can be a scope to assign students in a learning conditions. Students can always be touch with their teachers.

REFERENCES

- [1] Classroom technologies narrow education gap in developing countries Steven Livingston Tuesday, August 23, 2016
- [2] Ben McNeely. Using Technology as a Learning Tool, Not Just the Cool New Thing, Educating the Net Generation February 2005
- [3] Subhenur Latif and Narayan Ranjan Chakraborty "Virtual Community in Interactive Teaching: Five Cases." e-ISSN: 2278-0661, p-ISSN: 2278-8727 Volume 15, Issue 6 (Nov. -Dec. 2013), PP 69-75
- [4] Yousuf Islam. "Tertiary Education in Bangladesh –Brief History, Problems and Prospects", International Journal for the Scholarship of Teaching and Learning, Vol. 5, No. 2, pp-4, July 2011.
- [5] Integrating Technology into the Classroom Jong H. Chung United States Military Academy, West Point, NY, 2007.
- [6] 2013.University of the Sciences Website. [Online]. Available:
<http://www.usciences.edu/teaching/tips/spal.shtml>
- [7] Integrate Technology In The Curriculum As An Effective Teaching Strategy Dr. Fatma Abdullah. Available:
<http://www.ijarsite.com/wp-content/uploads/2016/03/IJAR-4-1-2016.pdf>
- [8] Using the technology of today, in the classroom today. Eric Klopfer, Scot Osterweil, Jennifer Groff, Jason Haas. Available:
http://dmlcentral.net/wp-content/uploads/files/GamesSimsSocNets_EdArcade.pdf
- [9] Technology Integration |Ideas That Work. Available:
http://www.educationworld.com/a_tech/tech/tech176.shtml
- [10] 2013.University of the Sciences Website. [Online]. Available:
<http://www.usciences.edu/teaching/tips/spal.shtml>
- [11] Shibli Shahriar (2011).Daffodil International University Forum. Available:
<http://forum.daffodilvarsity.edu.bd/index.php?topic=4622.msg21529#msg21529>
- [12] Internet Has Many Benefits Available:
<http://iml.jou.ufl.edu/projects/STUDENTS/Lui/index3.htm>
- [13] O'REILLY, Tim & BATTELLE, John; (2009). Web Squared: Web 2.0 Five Years On. Available:
<http://conferences.oreilly.com/web2summit/web2009/public/schedule/detail/10194>